

*Gilbert  
Lake  
1981*

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A. HIGHLIGHTS

Flooding of the unit by the Illinois River from April through July (section F.2)

Discussion of new management practices for Pere Marquette land to prevent erosion of the Archaeological site with IDC personnel. (section J.1)

F. HABITAT MANAGEMENT

2. Wetlands

Gilbert Lake was drained down twice to allow a contract dragline to get into the area to clean out a water control ditch, but the flooding Illinois River filled it both times. No wetlands management could be conducted because of flood waters.

Three vegetation transects were run on the unit. Combined total for all three transects showed willows to be the most prominent plant comprising 50% of the total. Swamp smartweed was the second most prominent plant showing up as 21% of the total. Silver maple, sweetgum, cottonwood and red buckeye made up the rest of the plants found on the area.

4. Croplands

There were 117 acres of land farmed by one cooperator. The cooperative agreement called for the planting of 5 acres of clover, 38 acres of soybeans, 33 acres of corn and 5 acres of sunflowers. Seventeen acres of corn were to be left in the fields for waterfowl and 16 acres of low lying land which had just been cleared of brush was to be planted to buckwheat as waterfowl food and to prevent brush from coming back. Thirty three acres of standing soybeans were to be aerially seeded to wheat. Ten acres of brome/orchard grass, alfalfa mixture was harvested as hay. Because of the flooding only 25 acres of corn matured with 10 acres being left for waterfowl, 18 acres were planted but drowned out. Twelve acres were replanted to grain sorghum but not in time for it to mature. Only 31 acres of soybeans could be sowed and 26 of these acres were aerially seeded to wheat. The other 5 acres were sown to wheat and it will be seeded to red clover in March 1982. The farmer was also able to plant 5 acres of sunflowers.

8. Haying

Five acres of brome/orchard grass, alfalfa mixture were hayed. This hay field has been in production for several years and the stand has become thin. It will have to be broken up shortly.

10. Pest Control

Lasso and lorax were mixed and applied on 56 acres of corn and soybeans.

to control morning glory, cocklebur and smartweed. Lorax was applied at a rate of 1/3 lb. A.I./acre and lasso was applied at a rate of 1/2 lb. A.I./acre.

#### G. WILDLIFE

##### 2. Endangered and/or Threatened Species

Endangered American Bald Eagles and a threatened osprey were both observed. There was a peak of 9 Bald Eagles. Bald Eagles accounted for 640 use days. One osprey was observed on the area.

##### 3. Waterfowl

Duck use amounted to 695,459 use days a slight increase of 5% over 1980. Mallard use of 489,310 use days accounted for 74% of the use. A peak of 4,015 ducks was reached in late October.

A total of 215 ducks were produced (50 mallards, 15 blue-winged teal and 150 wood ducks).

Goose use totaled 442,080 use days. Snow/blue geese accounted for 313,230 use days or 71% of the total. Canada Geese accounted for 128,850 use days or 29% of the total. This compares to 201,400 blue/snow goose use days and 129,050 Canada Goose use days in 1980.

##### 4. Marsh and Water Birds

Six species accounted for 10,280 use days. The great egret was the most common species recording 7,650 use days. Great blue herons were the second most abundant species using the area for 2,175 use days. Green herons, pied-billed grebe, double-crested cormorant and horned grebes were found in lesser numbers.

##### 5. Shorebirds, Gulls, Terns and Allied Species

Eleven species recorded 3,455 use days. Lessor yellowlegs and killdeer were found in the most abundant numbers. The following shorebirds were found in lesser numbers, pectoral sandpiper, least sandpiper, common snipe, and semi-palmated sandpiper.

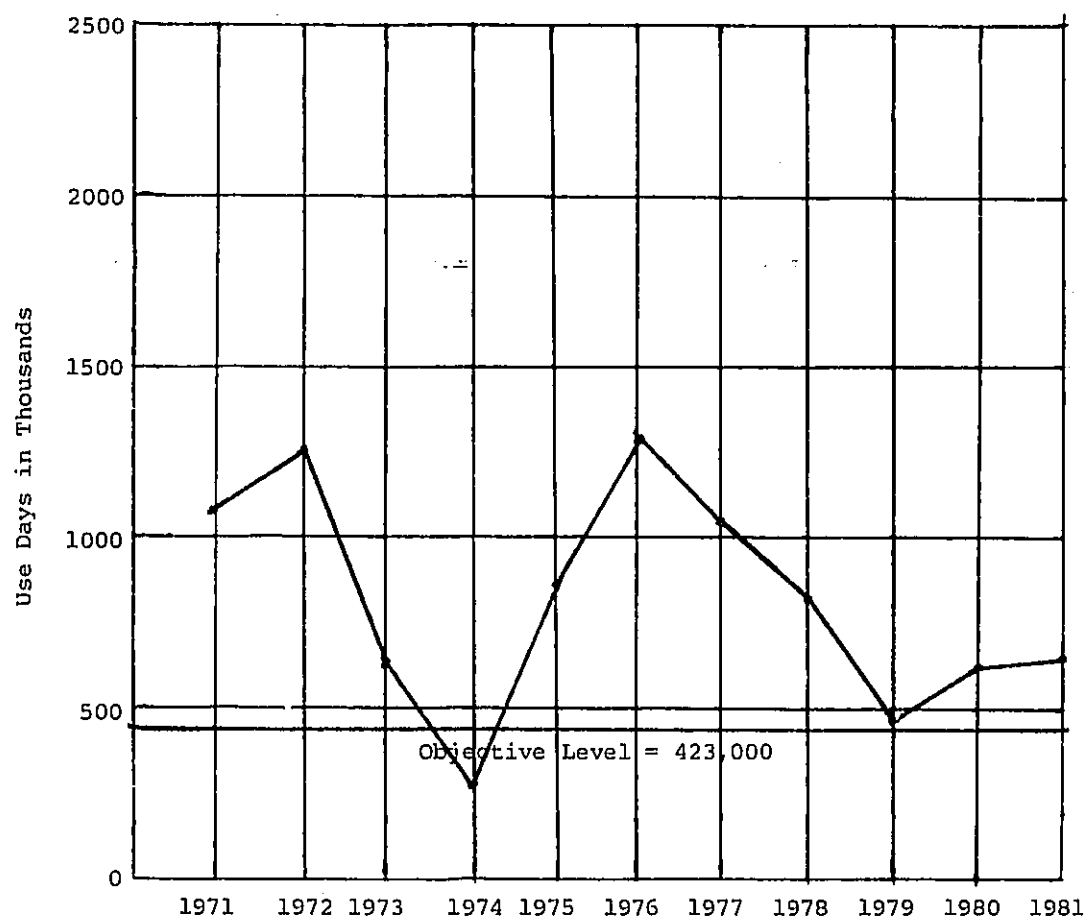
The ring-billed gull was the only gull or tern observed.

##### 6. Raptors

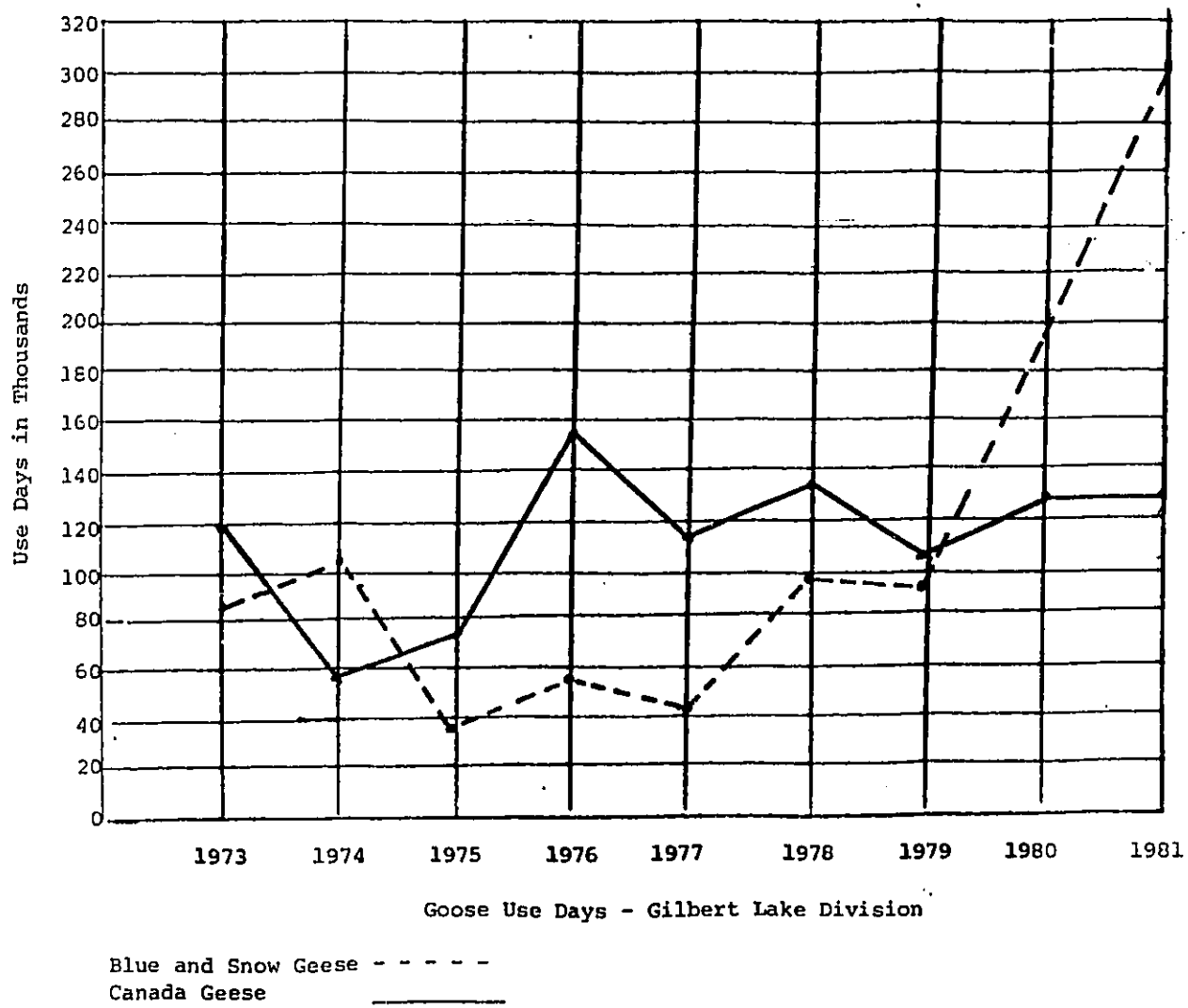
Six species used the area for 2,030 use days. The American kestrel, the most abundant species was on the area for 290 use days. The most abundant owl was the screech owl which used the area for 680 use days. Marsh hawks, red-tailed hawks, barred owls and great horned owls were found in lesser numbers.

##### 7. Other Migratory Birds

Large concentrations of doves were seen on the Gilbert Lake maintenance



Duck Use Days - Gilbert Lake Division



road picking up grit. A peak of 200 was observed in August. They were on the area for 20,000 use days.

8. Game Mammals

The cottontail rabbit, beaver, muskrats, gray squirrels and fox squirrel population all increased. The beaver population was high enough that they were a constant hindrance to water management activities. The opossum, raccoon and white-tailed deer populations remained stable. There was a lot of movement of deer back and forth between the refuge and the surrounding Pere Marquette land during the state hunting season.

10. Other Resident Wildlife

This group included the bobwhite quail and an occasional eastern wild turkey that came on to the area from the Pere Marquette State Park where they were stocked in 1980.

H. PUBLIC USE

7. Other Interpretive Programs.

A group of 40 Environmental students from SIU Edwardsville were taken on a tour of Gilbert Lake by Refuge Manager Peyton. These students were all teachers that were back in school to pick up refresher courses.

11. Wildlife Observation

Large numbers of visitors stopped on the overlook road off of State Highway 100 to view the geese which concentrate in this area feeding on crops growing in the nearby fields. Visitors made 4,106 visits for a total of 931 activity hours.

16. Other Non-Wildlife Oriented Recreation

Fifty visitors were on the area picking up pecans.

17. Law Enforcement

Patrols were made on the archaeological site to keep visitors from picking up artifacts.

I. EQUIPMENT AND FACILITIES

2. Rehabilitation

There were \$6,000 revolving rehab. funds which were to be used to clean out the Gilbert Lake water control ditch. This work could not be accomplished because of the high water.

J. OTHER ITEMS

1. Cooperative Programs

Refuge Manager Peyton and Quincy Acting Refuge Manager Bates met with IDC personell to work out a manamement plan to stop erosion of the archaeological site on Pere Marquette State Park Land which is managed as a part of Gilbert Lake Division. It was decided to take the area out of row crop production and to sow a permanent pasture crop.